# Nevada State Climate Office

Photo by B. Hatchett

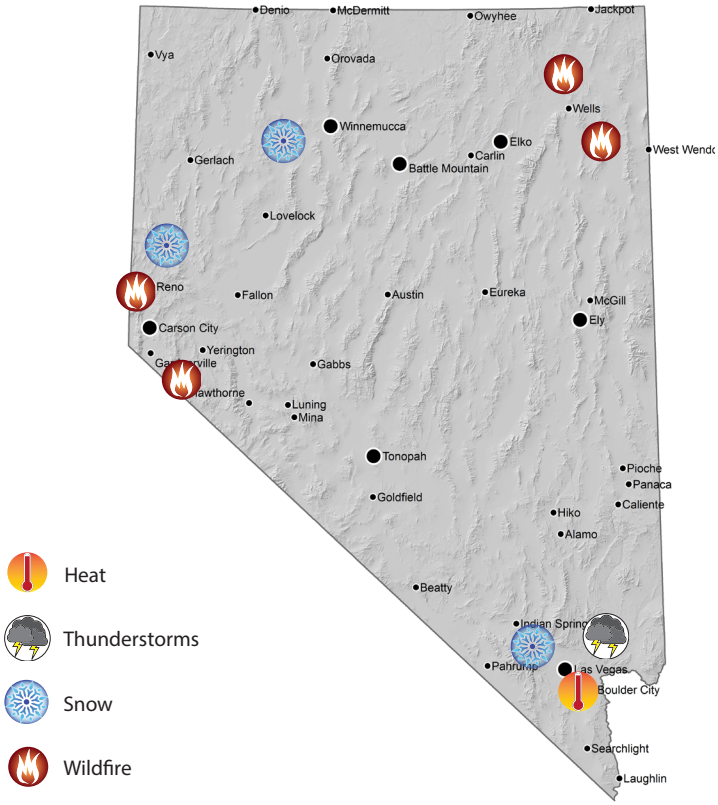
## Quarterly Report and Outlook

*Informe Trimestral y Pronóstico en línea*

*www.unr.edu/climate/climate-summary*

**April - June 2018**

## Notable Weather and Climate in Nevada

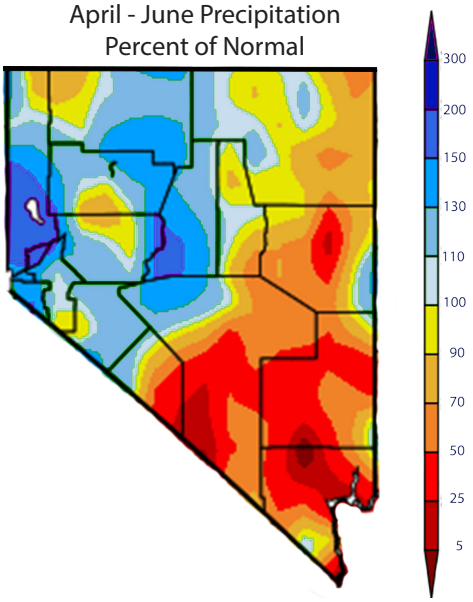



After a relatively dry winter, southern Nevada also experienced a relatively warm, dry spring. Not record-breaking, but in April, the southern part of the state was 5.7°F warmer than normal, the fourth warmest April since 1895. The Las Vegas area got a bit of a break in early May, with rain and high-elevation snow reported, along with high temperatures in the 60s at McCarran International Airport. Not to worry, though, the temperature hit 101°F just about a week later. April snow and nine days of measurable precipitation during May in the Reno area contributed to the wetter than normal spring. Parts of northwestern Nevada were even a degree or two cooler than normal.

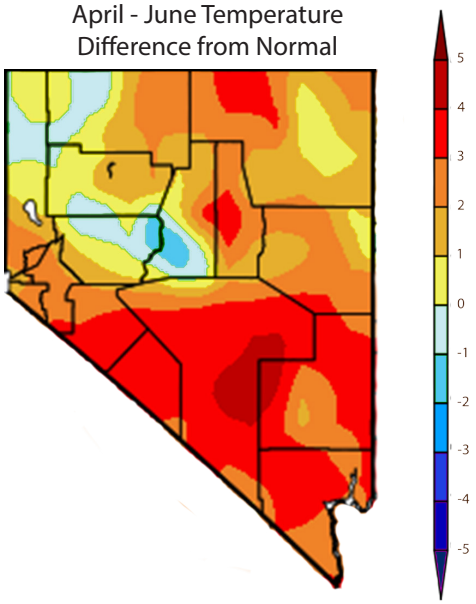
As of last week, just over 52% of Nevada was categorized as Abnormally Dry with an additional 32% experiencing Moderate Drought, and a tiny portion of southern Nevada experiencing Severe Drought (D2).

**The eagle-eyed among you may have noticed an error in the April Report. The maps showing percent of normal precipitation and temperature difference from normal were under the wrong headings. This embarrassing goof has been fixed.**

April - June Precipitation
Percent of Normal

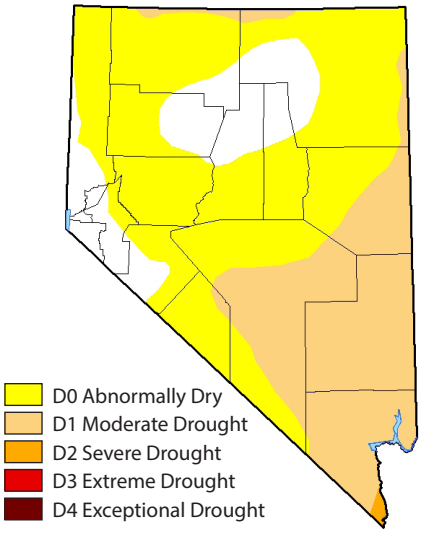



April - June Temperature
Difference from Normal




http://www.hprcc.unl.edu/maps.php?map=ACISClimateMaps#

June 26 Drought Monitor



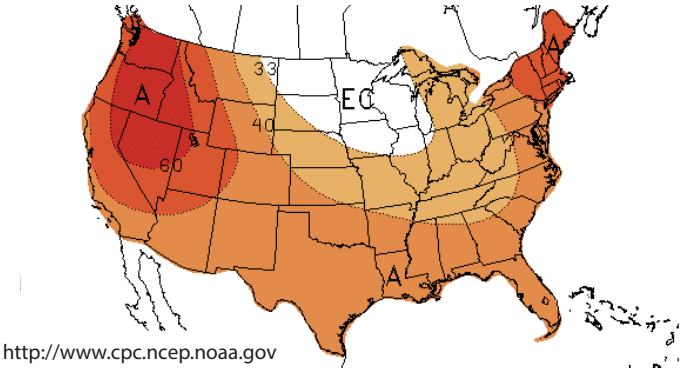

http://droughtmonitor.unl.edu

State Climatologist, Douglas Boyle (douglasb@unr.edu)
Dep. State Climatologist, Stephanie McAfee (smcafee@unr.edu)

Spanish translation, Chelsea Canon

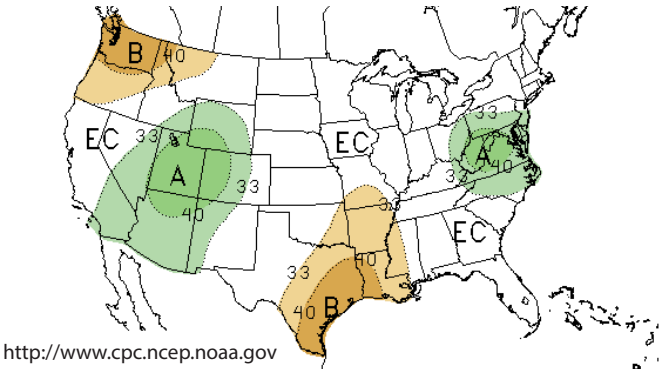
## Outlook for July - September

**Temperature**




http://www.cpc.ncep.noaa.gov

**Precipitation**




http://www.cpc.ncep.noaa.gov

As we head into summer, most Nevadans prepare for hot, dry, windy weather, with one exception. In the far southern part of the state, summer rains associated with the North American Monsoon can make July and August nearly as wet as winter, although daytime temperatures are often over 100°F. This summer looks like no exception to the usual warm conditions. All of the state has at least a 50% chance of being warmer than normal, and a 70-80% chance of being normal or above normal. There is a slightly better than normal chance of above average precipitation in southern and northeastern Nevada throughout the summer. In the northwest, there are equal chances of low, normal, or high precipitation, but this area is typically quite dry, with average July-September precipitation of just over an inch. Currently, there is an El Niño watch for the fall and winter. This often means a wetter than normal winter for southern Nevada, so stay tuned for updates from the tropics.

## In-depth

### *Fire Weather*

It's that time of year again. Fire season. By early July InciWeb *(https://inciweb.nwcg.gov/)* reported four wildfires in Nevada since the start of the fire season. They ranged from a 63-acre fire just outside of Reno to the 5,070-acre HD Fire near Wells. Many parts of the state also experience poor air quality when smoke from wildfires burning outside the state wafts into the region.

***What makes for dangerous fire weather?*** The general recipe is dry vegetation, low humidity, and wind. That particular mix of conditions often comes with high temperatures, as well. As Margaret Atwood notes though, "Context is all." The exact mix of what constitutes dangerous weather varies from place to place. Depending on topography and the type (grass vs. shrubs vs. trees) and amount of vegetation, different thresholds for wind and humidity are of concern. Wind, humidity, and temperature also offset each other. For example, high winds during a heavy rainstorm don't typically increase fire danger. A forecast for dry lightning might tip the scales toward dangerous fire weather even with higher humidity.

***How is dangerous fire weather indicated?*** The National Weather Service issues Fire Weather Watches and Red Flag Warnings. A Fire Weather Watch indicates that weather conducive to fire ignition and spread is likely in the next several days. A Red Flag Warning means that dangerous fire weather conditions are in place or will almost certainly develop within the next couple of days.

***Why is it a Red Flag Warning?*** Most NWS Warnings are pretty straightforward. A High-Wind Warning means you can expect high winds, but no one is concerned about red flags massing on the horizon. Per Larry Van Bussum, National Fire Weather Operations Coordinator, by way of Tim Brown, Director of the Western Regional Climate Center, the term Red Flag Warning arose in the 1950s and 60s because, "Ranger districts would literally raise a red flag on the flag pole when a warning was in effect to let people know, visually, that a watch or warning was in effect." This term apparently developed in the West, as Mary Knapp at Kansas State University and Larry Ruthi of NOAA noted that Red Flag Warnings weren't issued in the central U.S. until the early 2000s.

**Want more information? Check out Living with Fire (*http://www.livingwithfire.info/*) and this video about fire weather by NWS Reno (*https://www.youtube.com/watch?v=H6Woc5it_HI*).**